



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,751	02/22/2002	Hung Nguyen	HNguyen 01	7620

7590 07/06/2004
Hung Nguyen
1011 Sandalwood Lane
Milpitas, CA 95035

EXAMINER

JACKSON, BLANE J

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,751

Applicant(s)

NGUYEN, HUNG

Examiner

Blane J Jackson

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-38 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7 and 9 is/are rejected.
- 7) ☒ Claim(s) 3,5, 8 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 9, the phrase "substantially the same" renders the claim indefinite because, in view of the Specification, page 11, lines 8-12, is referenced to a variable frequency range of 2.4 to 5.0 GHz. Wireless cellular systems communicate over defined frequency channels. See MPEP § 2173.05(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Chulajata et al. (U.S. Patent 6,434,375).

As to claim 1, Chulajata teaches a method for transferring data in a wireless communication system comprising the steps of:

allowing a first component to carry a first data stream running at a first frequency (figure 2, data collected by antenna (101a) to mixer (105)),

allowing a second component to carry a second data stream running at a second frequency (local oscillator to mixer (105)),

transferring the second data stream from the second component through the first component which combines the first data stream and the second data stream to form a third data stream running at a third frequency which is the sum of the first frequency and the second frequency (mixer down converts to the sum or difference third frequency),

Sending the third data stream to a third component (figure 2, filter (107), column 2, lines 30-64).

As to claim 2, Chulajata teaches the method of claim 1 wherein the wireless communication system uses the technology selected from a group consisting of the CDMA, TDMA and GSM (column 2, lines 30-48).

As to claim 4, Chulajata teaches the method of claim 1 wherein the wireless communication system is connected to an electronic network (CDMA wireless communication system, Abstract).

As to claims 6 and 7, in view of the inherent nature of the physical interconnection of wireless base station equipment, it is considered that the first, second and third components of Chulajata can be "removably connected".

Allowable Subject Matter

3. Claims 3, 5, 8, 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 13-23, 24-28, 29-32, 33-35 and 36-38 are allowed. The following is an examiner's statement of reasons for allowance:

As to claim 13, the prior art made of record failed to teach a method for transferring data in a wireless communication system comprising transferring the third data stream from the third component through the first component which separates the third data stream into the first data stream and the second data stream, then sends the second data stream to the second component.

As to claims 24, 29, 33 and 36, the prior art made of record failed to teach an access point for use in a wireless communication system comprising at least one radio

frequency unit connected via a connecting point to a base band unit wherein the radio frequency unit having a plurality of sub units connected as a daisy chain including a first sub unit and a second sub unit and the first sub unit carries a first data stream running at a first frequency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kwon et al. (U.S. Patent 6,587,451) discloses smart antennas for IMT-2000 code Division Multiple Access wireless communications. Dogan (U.S. Patent 6,650,881) discloses a base station for connection to a WAN with multiple RF channels to support a smart antenna system with emphasis on calculating spatial weights. Wange et al. (U.S. Patent 6,404,803) discloses an adaptive antenna array system for CEA wireless communications with PN code acquisition and adaptive threshold. Hou et al. (U.S. Patent 6,483,459) discloses a smart antenna system for wireless communication system with parallel RF sections.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J Jackson whose telephone number is (703) 305-5291. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000